



Dragonfly Fact Sheet

What is a dragonfly?

Most people are familiar with the four-winged insect that has a long body and colorful markings. They are sighted flying quickly or hovering as they look for prey. Dragonflies are predators, whisking other flying insects into a trap formed by their hairy legs. Their powerful jaws chomp through their prey starting with the head first. The fossil record includes dragonflies with 3-foot wingspans and indicates that dragonflies appeared on earth well before dinosaurs.



Dragonfly Life Cycle

A dragonfly's life begins under - water after the female lays her eggs, dropping them into water or inserting them into a plant or sand near water. The egg hatches into a larva after about 10 days.

Dragonfly larvae live underwater for several years—up to 5 years in some species—eating other aquatic insects, tadpoles and even small fish to survive. They shed their outer skin as they grow.

To escape from predators such as fish, dragonfly larvae can shoot water forcefully out of the end of their abdomens which propels them quickly away from danger.

Once a larva is ready to become an adult, a transformation occurs. The dragonfly stops eating and crawls to the edge of the water. It climbs onto something that it can hold firmly and begins to gulp air to expand its body.

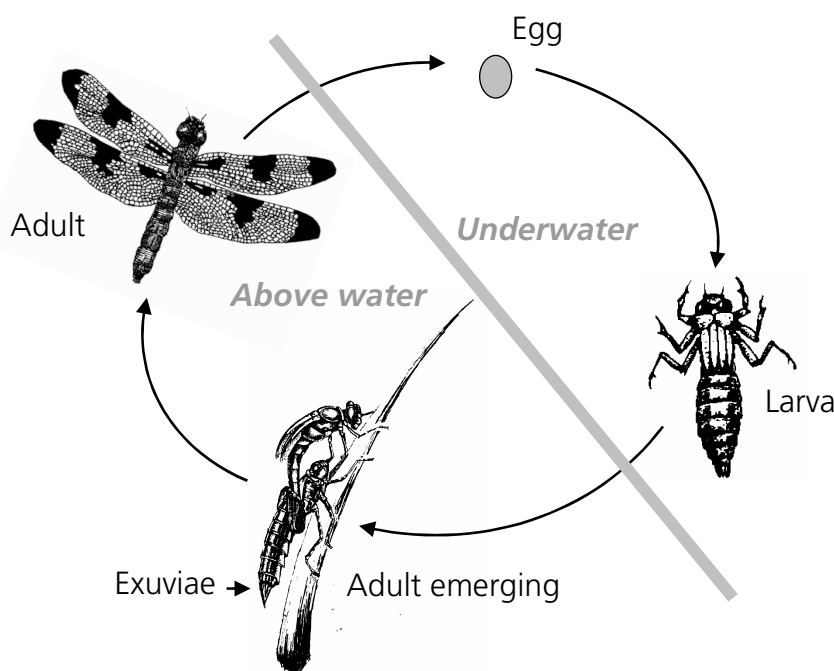
The outer skin then splits behind their heads. Slowly, the adult dragonfly pulls itself out of its outer skin. The wings unfurl and the dragonfly rests as it dries. Once dried, it usually flies away from the water to hunt its first meal. The empty skin left behind is called an exuviae.

St. Croix Discovery

Biologist William Smith collected dragonfly exuviae at County Road O Landing on the St. Croix River during the summer of 1989. He noticed that some of the exuviae looked different from the others. He took them back to the laboratory and looked at them under a microscope.

He then collected live dragonfly larvae. The larvae were raised to adults in the laboratory. As the adults emerged, it was clear to biologists that they were looking at an unknown species.

The new species was named *Ophiogomphus susbehcha*, the St. Croix Snaketail Dragonfly. It prefers clean, large river habitat.



Dragonflies on the Riverway

The following species occur on either the St. Croix or Namekagon rivers. Damselflies are closely related to dragonflies and can be identified by how they hold their wings when resting. Damselflies fold their wings up over their back while dragonflies hold their wings out flat.

Dragonflies

| <u>Common Name</u> | <u>Scientific Name</u> |
|---------------------------|------------------------------------|
| Darners | |
| Canada Darner | <i>Aeshna canadensis</i> |
| Lance-tipped Darner | <i>Aeshna constricta</i> |
| Shadow Darner | <i>Aeshna umbrosa</i> |
| Green Darner | <i>Anax junius</i> |
| Springtime Darner | <i>Basiaeschna janata</i> |
| Fawn Darner | <i>Boyeria vinosa</i> |
| Clubtails | |
| Horned Clubtail | <i>Arigomphus cornutus</i> |
| Black-shouldered Spinyleg | <i>Dromogomphus spinosis</i> |
| Midland Clubtail | <i>Gomphurus fraternus</i> |
| * Splendid Clubtail | <i>Gomphurus lineatifrons</i> |
| Cobra Clubtail | <i>Gomphurus vastus</i> |
| * Skillet Clubtail | <i>Gomphurus ventricosus</i> |
| Moustached Clubtail | <i>Gomphus adelphus</i> |
| Green-faced Clubtail | <i>Gomphus viridifrons</i> |
| Ashy Clubtail | <i>Gomphus lividus</i> |
| * Rapids Clubtail | <i>Gomphus quadricolor</i> |
| Dusky Clubtail | <i>Gomphus spicatus</i> |
| Dragonhunter | <i>Hagenius brevistylus</i> |
| * Extra-striped Snaketail | <i>Ophiogomphus anomalus</i> |
| Boreal Snaketail | <i>Ophiogomphus colubrinus</i> |
| * Pygmy Snaketail | <i>Ophiogomphus howei</i> |
| Rusty Snaketail | <i>Ophiogomphus rupinsulensis</i> |
| * St. Croix Snaketail | <i>Ophiogomphus susbehcha</i> |
| Common Sanddragon | <i>Progomphus obscurus</i> |
| * Riverine Clubtail | <i>Stylurus amnicola</i> |
| Arrow Clubtail | <i>Stylurus spiniceps</i> |
| Spiketails | |
| Twin-spotted spiketail | <i>Cordulegaster maculate</i> |
| * Arrowhead Spiketail | <i>Cordulegaster oblique</i> |
| Cruisers | |
| Stream Cruiser | <i>Didymops transversa</i> |
| Illinois River Cruiser | <i>Macromia illinoiensis</i> |
| Emeralds | |
| Racket-tailed Emerald | <i>Dorocordulia libera</i> |
| Beaverpond Baskettail | <i>Epithea canis</i> |
| Prince Baskettail | <i>Epithea princeps</i> |
| Common Baskettail | <i>Epithea cynosure</i> |
| Spiny Baskettail | <i>Epithea spinigera</i> |
| * Smoky Shadowfly | <i>Neurocordulia molesta</i> |
| * Stygian Shadowfly | <i>Neurocordulia yamaskanensis</i> |
| * Kennedy's Emerald | <i>Somatochlora kennedyi</i> |

Skimmers

| | |
|----------------------|---------------------------------|
| Calico pennant | <i>Celithemis elisa</i> |
| Dot-tailed Whiteface | <i>Leucorrhinia intacta</i> |
| Pied Skimmer | <i>Libellula luctuosa</i> |
| Four-spotted Skimmer | <i>Libellula quadrimaculata</i> |

Miscellaneous

| | |
|------------------|------------------------|
| (no common name) | <i>Ladona julia</i> |
| Whitetail | <i>Plathemis lydia</i> |

Damselflies

| <u>Common Name</u> | <u>Scientific Name</u> |
|-----------------------------|------------------------------|
| Broad-winged Damsels | |
| River Jewelwing | <i>Calopteryx aequabilis</i> |
| Ebony Jewelwing | <i>Calopteryx maculate</i> |
| American Ruby-spot | <i>Hetaerina americana</i> |
| Pond Damsels | |
| Blue-fronted Dancer | <i>Argia apicalis</i> |
| Blue-tipped Dancer | <i>Argia tibialis</i> |
| Hagen's Bluet | <i>Enallagma hageni</i> |

* Population is listed as endangered, threatened, rare, or of special concern by state and/or federal agencies.

Learn More

Student Books

Dragonflies, Molly McLaughlin. 1989. Walker & Company.

Nature Close-Up – Dragonflies and Damselflies, Dwight Kuhn, 2005. Blackbirch Press

Guide Books

Guide to Common Dragonflies of Wisconsin, Karl & Dorothy Legler, 1996.

Damselflies of the North Woods, Robert Dubois, 2005. Kollath-Stensaas.

Dragonflies of the North Woods, Kurt Mead, 2003. Adventure Publications.

Stoke's Beginner's Guide to Dragonflies, Blair Nikula, Jackie Sones, Lillian Stokes, Donald Stokes, 2002. Little, Brown and Company.